

REMARKS

Claims 23 through 104 are pending. By this Amendment, claims 23, 34, 40, 46, 54, 62, 68, 74, 82 and 90 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

At the outset, Applicants appreciate the indication that claims 32, 33, 36-39 and 96 through 99 are allowed.

Claims 23 through 27, 30, 31, 34, 35, 40-47, 52, 53, 62-75, 80, 81, 90-95 and 102 through 104 were rejected under 35 U.S.C. §102(b) over White et al. This rejection is respectfully traversed.

Claim 23 is directed to a nasal mask cushion including a frame, a membrane and a nose receiving cavity. The membrane has a radius of curvature oriented toward the nose receiving cavity.

By contrast, White et al. discloses a mask having an inturned lip that forms a seal on the edge of the mask with the wearer's face. See the Abstract. White et al. discloses the use of two or more contact surfaces that are used, the one most external being a flexible inturned lip and the remaining one or more being flexible and feathered inward toward the face, creating multiple pressure pockets. See column 1, lines 32 through 37. Further, the intermediate contact surfaces are pointed inward on the face to increase contact ability during movement of the mask. See column 2, lines 24 and 25. In addition, White et al. describes that the inner seal, i.e., the primary inner seal 18, points inward along the face. See column 3, lined 30-32 as well as claim 1, line 3 which recites "an inturned lip forming a turnover seal edge."

By contrast, claim 23 sets forth that the membrane has a radius of curvature oriented towards the nose receiving cavity. The original specification provides support for this subject

matter. See, e.g., Figure 5, in which the orientation of the membrane is oriented in an opposite sense as compared to Figure 4 of White et al.

With respect to claim 34, White et al. does not teach or suggest a seal forming portion disposed around a perimeter of the aperture adapted to deform and form a seal over a portion of the wearer's face in a region between the base of the nose and the upper lip and around the sides and over the bridge of the wearer's nose when the mask is in use. White et al. teaches the use of the seal which is positioned on the bridge of the nose and around the sides of the nose, as well as under the chin.

With respect to claim 40, White et al. does not teach a nasal mask cushion including, *inter alia*, a second molded inwardly curved rim having a curvature oriented to present a generally convex sealing surface to the wearer's face in use. By contrast, White et al. teaches the use of a generally concave sealing surface that is presented to the user's face in use.

With respect to independent claim 46, White et al. does not teach that the first and second molded inwardly curved rims are curved generally towards the nose receiving cavity. By contrast, White teaches an inner seal 18 and intermediate seals 12 which are generally curved away from the nose receiving cavity.

With respect to independent claim 62, White et al. does not teach that a substantially full perimeter of the second molded inwardly curved rim is curved towards the front portion of the frame opposite the wearer's face, as recited in independent claim 62. The Office Action on page 4, paragraph 11, indicates that White's intermediate seal 12 is the claimed second membrane of resilient material. However, the intermediate seal 12 is not curved towards a front portion of the frame opposite the wearer's face, as recited in claim 62.

With regard to independent claim 68, White et al. does not teach that each of the first and second molded inwardly curved rims has a radius of curvature generally oriented in a direction towards the sidewall of the frame, as recited in claim 68.

With regard to independent claim 74, White et al. does not teach or suggest that the first and second molded inwardly curved rims are generally curved towards the nose receiving cavity.

With regard to independent claim 90, White et al. does not teach or suggest that the second molded inwardly curved rim is curved in a direction towards a front portion of the frame opposite the face contacting seal.

Reconsideration and withdrawal of the rejection are respectfully requested.

In paragraph 23 of the Office Action, claims 28, 29, 48-41 and 76-79 are rejected under 35 U.S.C. §103(a) over White et al. in view of Sullivan et al. This rejection is respectfully traversed as each of these claims depends from one of the independent claims which is allowable for the reasons discussed above.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 54, 55, 60, 61, 82, 83, 88, 89, 100 and 101 are rejected under 35 U.S.C. §103(a) over Sanders et al. in view of White et al. This rejection is respectfully traversed.

At the outset, the Office Action provides no motivation as to why one of ordinary skill in the art would have substituted the mask of White et al. for the mask of Sanders et al. Sanders et al. discloses a method and apparatus for maintaining airway patentcy to treat sleep apnea and other disorders. Generally speaking, treatment of sleep apnea involves the use of a flow generator which provides pressurized gas to the patient. However, White et al. is directed to a mask worn over a wearer's face for air filtration or purifying. See the Abstract, column 1 (Field Of The Invention), and the Summary Of The Invention (the invention in its broadest aspect

comprises a device for filtering or purifying air). Moreover, the focus of White et al. is to prevent atmospheric air from entering the nasal cavity via the seal, rather than minimizing the escape of pressurized gas from the nasal cavity to atmosphere. See, e.g., Col. 2, lines 33-35 and Col. 3, lines 60-63. As such, the orientation and structure of White's seal system are ill-suited for sleep apnea applications.

In addition, neither Sanders et al. nor White et al. teaches or discloses that the seal portion fully covers the first molded inwardly curved rim so that the second inwardly curved rim is positioned to provide the only seal with the wearer's face in use, as recited in claim 54. Sanders et al. does not teach or suggest the seal structure. White et al. teaches the use of a primary seal 18 and an intermediate seal 12, each of which is intended to contact the wearer's face, as shown in Figure 4. The use of multiple contacting surfaces to provide multiple seals creates multiple pressure pockets, as described, for example, in column 1, lines 31 through 37 of White et al. Multiple contact surfaces also provide for additional lines of defense against atmospheric air entering the nasal cavity. Col. 2, lines 33-35.

With respect to independent claim 82, neither Sanders et al. nor White et al. teaches or suggests a second membrane having a molded inwardly curved rim in which a portion of the second molded rim forms a face contacting seal portion with the wearer's face in use.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 56-59 and 84-87 were rejected under 35 U.S.C. §103(a) over Sanders et al./White et al. and further in view of Sullivan et al. However, this rejection is respectfully traversed at least for the reason that there is no motivation to combine White et al. with Sullivan et al. or Sanders et al., and because claims 56 through 59 and 84 through 87 depend from independent claims which are allowable for the reasons discussed above.

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Reconsideration and withdrawal of the rejection are respectfully requested.


In view of the above amendments and remarks, Applicants respectfully submit that the all the claims are patentable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desired to place the application in better condition for allowance, he is invited to contact the undersigned at the telephone number listed above.

Respectfully submitted,

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